

CLAIMS

1. A fuel cell vehicle, comprising:

a fuel cell (200) which generates power using fuel gas containing hydrogen,  
an air feeder (202) which supplies air to the fuel cell (200),  
a fuel supply device (201, 205, 260) which supplies fuel gas to the fuel cell (200),  
a motor (208) which drives the vehicle with power generated by the fuel cell  
(200),

a storage battery (207) which stores power generated by the fuel cell (200) and  
power regenerated by the motor (208), and supplies the stored power to the motor  
(207),

a sensor (250) which detects a toxic substance contained in the air supplied by  
the air feeder (202), the toxic substance causing the performance of the fuel cell to  
decrease,

a sensor (206) which detects the state of charge of the battery (207), and

a microprocessor (209, 254) programmed to control operation and stop of the  
fuel cell (200) based on the result of detecting the toxic substance and the state of  
charge of the battery (207).

2. The fuel cell vehicle as defined in Claim 1, wherein the microprocessor (209, 254)  
is further programmed to stop operation of the fuel cell (200) at a lower toxic  
substance concentration the higher the state of charge of the battery (207).

3. The fuel cell vehicle as defined in Claim 1, wherein the microprocessor (209, 254)  
is further programmed to operate the fuel cell (200) when the state of charge of the

battery (207) is less than a first reference value, and to stop the fuel cell (200) when the state of charge of the battery (207) is greater than a second reference value which is greater than the first reference value, regardless of the toxic substance detection result.

4. The fuel cell vehicle as defined in Claim 1, wherein the microprocessor (209, 254) is further programmed to operate or stop the fuel cell (200) based on the time average value of the toxic substance concentration, and the state of charge of the battery (207).

5. The fuel cell vehicle as defined in Claim 1, wherein the sensor (250) which detects the toxic substance concentration is a sensor which detects carbon monoxide.

6. The fuel cell vehicle as defined in Claim 1, wherein the microprocessor (209, 254) is further programmed to determine whether to operate or stop the fuel cell (200) by looking up a map which sets an operating region and a stop region of the fuel cell (200) having the toxic substance concentration and state of charge of the battery (207) as parameters.

7. The fuel cell vehicle as defined in Claim 1, wherein the fuel supply device (201, 205, 260) comprises a reformer (201) which generates hydrogen, and the microprocessor (209, 254) is further programmed to control operation or stop of the fuel cell (200) by controlling the operation of the reformer (201).

8. The fuel cell vehicle as defined in Claim 1, wherein the fuel supply device (201, 205,

260) supplies stored hydrogen to the fuel cell (200), and the microprocessor (209, 254) is further programmed to operate or stop the fuel cell (200) by controlling the supply of hydrogen from the fuel supply device (201, 205, 260) to the fuel cell (200).

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